Please replace all prior claims in the application with the following:

Claims 1-17 (cancelled).

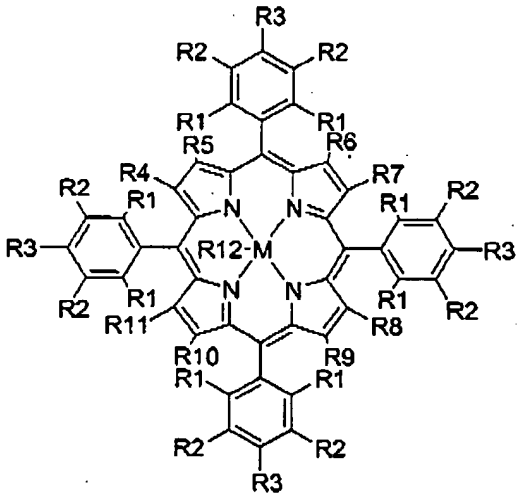
Claim 18 (new): A process for oxidizing an organic compound having at least one nitrogen atom, sulfur atom, hydroxy group, or carbon-carbon double bond, the process comprising:

reacting an organic compound with an oxidizing agent in a reaction medium comprising a metalloporphyrin and an inert aromatic solvent;

recovering desired reaction products; and

identifying the desired reaction products;

wherein the metalloporphyrin is represented by formula 1,



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in which R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, and R11 are independently hydrogen or an electron-withdrawing group;

R12 is Cl or acetate; and

M is iron, manganese, chromium, ruthenium, cobalt, copper or nickel.

Claim 19 (new): The process of claim 18, wherein the reaction medium further comprises a polyhalogenated aliphatic solvent.

Claim 20 (new): The process of claim 18, wherein the inert aromatic solvent is a polyhalogenated aromatic solvent.

Claim 21 (new): The process of claim 20, wherein the polyhalogenated aromatic solvent is trifluorotoluene.

Claim 22 (new): The process of claim 18, wherein the reaction medium further comprises a co-solvent capable of increasing the solubility of the organic compound in the reaction medium.

Claim 23 (new): The process of claim 22, wherein the co-solvent is a polar and poorly nucleophilic solvent.

Claim 24 (new): The process of claim 22, wherein the co-solvent is 2,2,2- trifluoroethanol or 1, 1, 1,3,3,3 -hexafluoro-propan-2-ol.

Claim 25 (new): The process of claim 22, wherein the co- solvent concentration ranges between 1% and 30%.

Claim 26 (new): The process of claim 18, wherein the reaction medium comprises a biphasic solution.

Claim 27 (new): The process of claim 26, wherein the reaction medium comprises an inert aromatic solvent and a co-solvent, the co-solvent having the capability of transferring the organic compound between phases.

Claim 28 (new): The process of claim 26, wherein the co-solvent is hexafluoroisopropanol.

Claim 29 (new): The process of claim 26, wherein the reaction medium comprises a first aqueous phase that includes the oxidizing agent and a second organic phase that includes the organic compound, the metalloporphyrin, and the inert aromatic solvent.

Claim 30 (new): The process of claim 29, wherein the second phase includes a co-solvent having the capability of transferring the oxidizing agent between phases.

Claim 31 (new): The process of claim 30, wherein the co-solvent is water-miscible.

Claim 32 (new): The process of claim 30, wherein the co-solvent is 1,1,1,3,3,3-hexafluoro-propan-2-ol.

Claim 33 (new): The process of claim 27, further comprising introducing a phase-transfer catalyst into the reaction medium, the phase-transfer catalyst having the capability of allowing the transfer of reactants from between phases.

Claim 34 (new): The process of claim 33, wherein the phase-transfer catalyst is a tetraalkyl ammonium salt.

Claim 35 (new): The process of claim 34, wherein the tetraalkyl ammonium salt is dodecyl-trimethyl-ammonium bromide.

Claim 36 (new): The process of claim 18, wherein R1, R2, and R3 of formula 1 are independently hydrogen, Cl, F, Br or SO_3Na.

Claim 37 (new): The process of claim 18, wherein R4, R5, R6, R7, R8, R9, R10, and R11 of formula 1 are independently hydrogen, Cl, F, Br, NO_2, CN or SO_3Na.

Please replace the Abstract with the following:

~~Oxidation of organic compounds is catalyzed by addition of a catalytic amount of a metalloporphyrin in a non-reactive aprotic solvent.~~ A process for oxidizing an organic compound having at least one nitrogen atom, sulfur atom, hydroxy group, or carbon-carbon double bond is disclosed. The process includes reacting the organic compound with an oxidizing agent in a reaction medium comprised of a metalloporphyrin and an inert aromatic solvent; recovering desired reaction products; and identifying the desired reaction products. The process is useful in pharmaceutical research and development where it can be used to obtain and analyze potential metabolites.